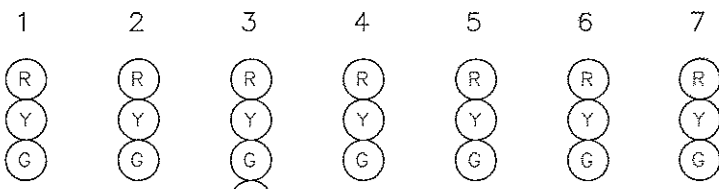


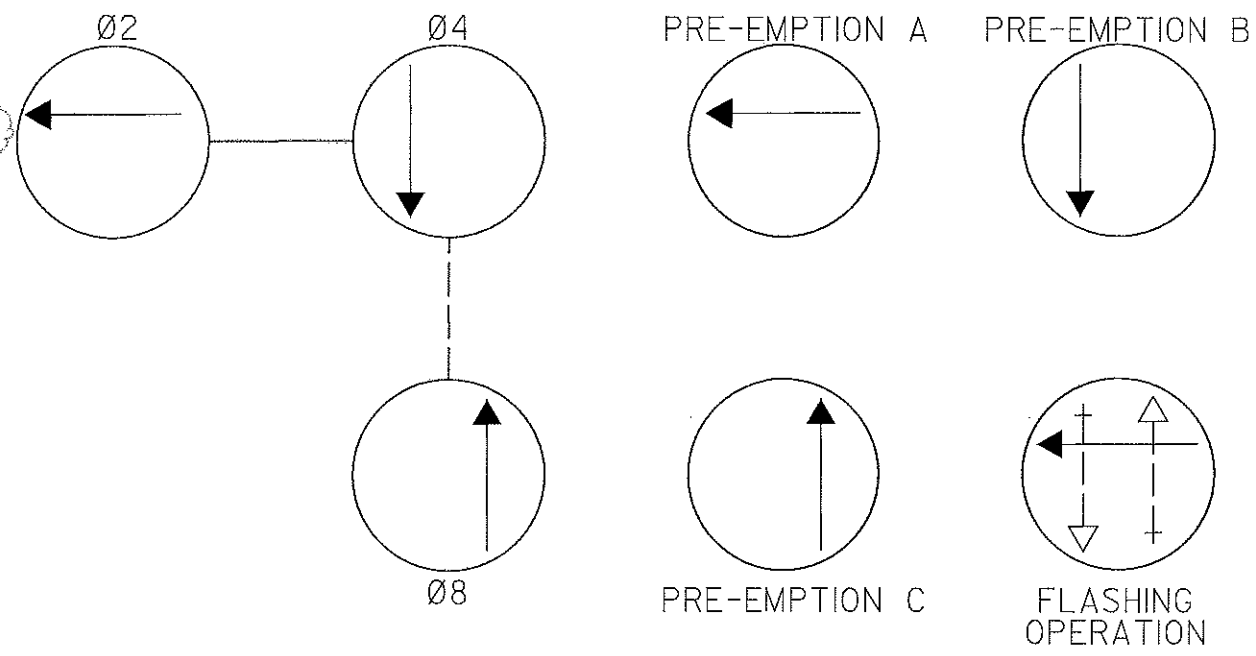
FHWA REGION NO	STATE	FED. AID PROJ. NO	SHEET NO.	TOTAL SHEETS
3	MD.	STPG-218-1(7)E	17	66

PHASING DIAGRAM



PHASE 2	G	G	R	R	R	R	R
2 CHANGE	Y	Y	R	R	R	R	R
PHASE 4 & 8	R	R	G	G	G	G	G
4 & 8 CHANGE	R	R	Y	Y	Y	Y	Y
PRE-EMPTION A	G	G	R	R	R	R	R
A CHANGE	Y	Y	R	R	R	R	R
PRE-EMPTION B	R	R	R	R	G	G	G
B CHANGE	R	R	R	R	Y	Y	Y
PRE-EMPTION C	R	R	G	G	R	R	R
C CHANGE	R	R	Y	Y	R	R	R
FLASHING OPERATION	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R	FL/R

NEMA PHASING



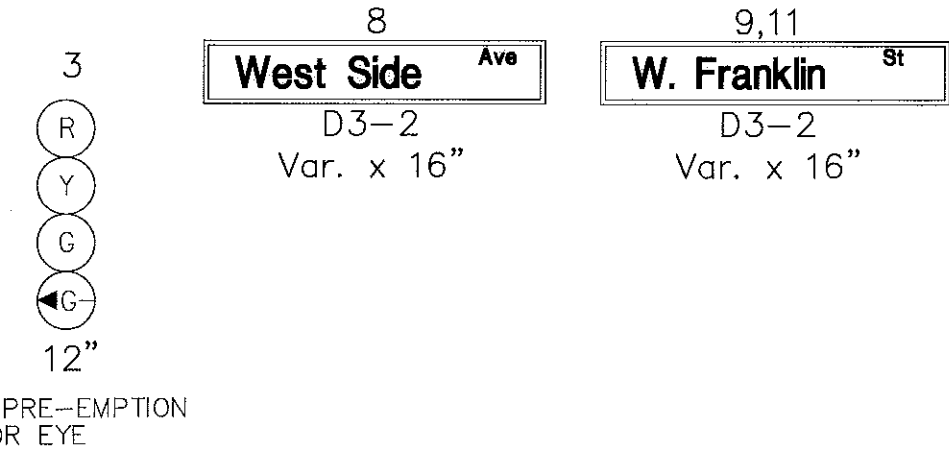
PHASING NOTES:
1. PHASES ASSOCIATED BY A SOLID LINE WILL NOT OPERATE CONCURRENTLY
2. PHASES ASSOCIATED BY A DASHED LINE WILL OPERATE CONCURRENTLY

EQUIPMENT LISTS

A. EQUIPMENT TO BE SUPPLIED BY THE SHA.				SPECIFICATION SECTION		DESCRIPTION	
QUANTITY	UNIT						
1	EA			SP		BASE MOUNTED LOCAL CABINET (SIZE 5) LESS DETECTION EQUIPMENT WITH 8 PHASE ASC II CONTROLLER WITH TELEMETRY AND OPTICOM PRE-EMPTION MODULE	
32	SF			813		FLAT SHEET ALUMINUM SIGNS CONSISTING OF: - 2 EACH D3-2 (W. Franklin St.) (VAR." X 16")-MAST ARM MOUNT - 1 EACH D3-2 (West Side Ave) (VAR." X 16")-MAST ARM MOUNT	
B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR.							
QUANTITY	UNIT						
3	CY			205		TEST PIT EXCAVATION	
8	CY			206		REMOVAL OF EXISTING SIDEWALK	
100	LF			SP 555		24 INCH WHITE PERMANENT PREFORMED PAVEMENT MARKING TAPE	
90	LF			SP		REMOVE EXISTING PAVEMENT MARKINGS--ANY WIDTH	
600	SF			610		4 INCH CONCRETE SIDEWALK	
1	EA			816		INSTALL CONTROLLER AND CABINET--BASE MOUNT	
32	SF			813		INSTALL OVERHEAD SIGN	
6	EA			SP		FURNISH AND INSTALL 12 INCH 1 WAY 3 SECTION (R, Y, G) SIGNAL HEAD HAVING PROPER ADJUSTABLE MAST ARM BRACKET, AND TUNNEL VISORS--PAINTED BLACK	
1	EA			SP		FURNISH AND INSTALL 12 INCH 1 WAY 4 SECTION (R, Y, G, GA) SIGNAL HEAD HAVING PROPER ADJUSTABLE MAST ARM BRACKET, AND TUNNEL VISORS--PAINTED BLACK	
3	EA			SP		FURNISH AND INSTALL OPTICOM DETECTOR EYE--MODEL 521	
3	EA			811		FURNISH AND INSTALL ELECTRICAL HANDHOLE	
9	CY			801		FURNISH AND INSTALL CONCRETE FOR SIGNAL FOUNDATION	
10	LF			805		FURNISH AND INSTALL 2" SCHEDULE 80 RIGID PVC CONDUIT--RISER	
30	LF			805		FURNISH AND INSTALL 3" SCHEDULE 80 RIGID PVC CONDUIT--RISER	
40	LF			805		FURNISH AND INSTALL 2" SCHEDULE 40 RIGID PVC CONDUIT--TRENCHED	
15	LF			805		FURNISH AND INSTALL 3" SCHEDULE 40 RIGID PVC CONDUIT--TRENCHED	
45	LF			805		FURNISH AND INSTALL 4" SCHEDULE 40 RIGID PVC CONDUIT--TRENCHED	
110	LF			805		FURNISH AND INSTALL 2" SCHEDULE 80 RIGID PVC CONDUIT--SLOTTED	
1	EA			807		FURNISH AND INSTALL CONTROL AND DISTRIBUTION EQUIPMENT	
1	EA			SP		FURNISH AND INSTALL 21--FOOT STEEL POLE WITH TWIN 50--FOOT AND 50--FOOT MAST ARMS--PAINTED GREEN	
1	EA			SP		FURNISH AND INSTALL 21--FOOT STEEL POLE WITH A SINGLE 38--FOOT MAST ARM--PAINTED GREEN	
3	EA			SP		CUT, CLEAN AND CAP TRAFFIC SIGNAL STRUCTURE	
1	EA			SP		AS--BUILT FOR TRAFFIC SIGNAL	
3	EA			804		FURNISH AND INSTALL GROUND ROD--3/4 INCH DIAMETER X 10--FOOT LENGTH	
200	LF			810		FURNISH AND INSTALL NO. 6 AWG STRANDED BARE COPPER GROUND WIRE	
250	LF			810		FURNISH AND INSTALL ELECTRICAL CABLE--1 CONDUCTOR (NO. 4 AWG -- THHN/THWN)	
450	LF			810		FURNISH AND INSTALL ELECTRICAL CABLE--5 CONDUCTOR (NO 14 AWG)	
225	LF			810		FURNISH AND INSTALL ELECTRICAL CABLE--7 CONDUCTOR (NO 14 AWG)	
400	LF			810		FURNISH AND INSTALL OPTICOM M-138 DETECTOR CABLE	
3	EA			SP		REMOVE AND DISPOSE OF EXISTING FOUNDATION 12" BELOW GRADE	
1	LS			SP		DELIVERY OF SALVAGED EQUIPMENT	
1	LS			SP		REMOVE AND DISPOSE OF EXISTING EQUIPMENT	
1	LS			SP		REMOVAL OF EXISTING SIGNAL EQUIPMENT TO BE SALVAGED	
NOTE: ALL EQUIPMENT AND/OR MATERIALS TO BE REMOVED BY THE CONTRACTOR, BUT NOT LISTED BELOW, SHALL BECOME THE PROPERTY OF THE CONTRACTOR.							
QUANTITY	UNIT					DESCRIPTION	
1	EA					MAST ARM POLE (SOUTHWEST CORNER)	
1	EA					CONTROLLER AND CABINET	
1	EA					PEDESTAL POLE AND BASE	

(WEST FRANKLIN STREET) IS RUN IN AN EAST--WEST DIRECTION.

SIGNS



CONSTRUCTION DETAILS

STEEL POLE, 2-38' MAST ARMS, SIGNAL HEADS, SIGNS, OPTICOM (NOTE: 1-2", 90--DEGREE P.V.C. BEND).

STEEL POLE, 28' MAST ARM, SIGNAL HEADS, SIGNS, OPTICOM (NOTE: 1-2", 90--DEGREE P.V.C. BEND).

SE-MOUNTED CABINET, SIZE #5, AND CONTROLLER WITH ALL NECESSARY AS SHOWN (NOTE: 2-4", 90 DEGREE P.V.C. BENDS; AND, 2-2", P.V.C. BENDS.)

NDHOLE.

P.V.C. (SCHEDULE 40) ELECTRICAL CONDUIT (TRENCHED).

P.V.C. (SCHEDULE 40) ELECTRICAL CONDUIT (TRENCHED).

P.V.C. (SCHEDULE 80) ELECTRICAL CONDUIT (SLOTTED).

P.V.C. (SCHEDULE 40) ELECTRICAL CONDUIT (TRENCHED).

ND REPLACE EXISTING SIDEWALK.

P.V.C. (SCHEDULE 80) ELECTRICAL CONDUIT -- RISER AND 3" WEATHERHEAD.

OF 2" P.V.C. (SCHEDULE 80) ELECTRICAL CONDUIT -- RISER AND COIL ITIONAL CABLE.

STING STOP BAR.

" SOLID WHITE LINE.

ISTING STEEL POLE, TWIN MAST ARMS, SIGNALS, SIGNS, AND FOUNDATION.

ISTING STEEL POLE, MAST ARM, SIGNALS, SIGNS, AND FOUNDATION.

SIDEWALK RAMP.

ISTING CABINET, CONTROLLER, AND FOUNDATION.

UTILITY LEGEND

— G —	GAS MAIN
— W —	WATER MAIN
— S —	SEWER MAIN
— SD —	STORM DRAIN
— TV —	CABLE TELEVISION
— E —	ELECTRIC CABLES
— T —	TELEPHONE CABLES
— A —	AERIAL CABLES

INTERSECTION DESCRIPTION

I. GENERAL

THIS INTERSECTION IS U.S. 40 WEST (WEST FRANKLIN STREET) AND WEST SIDE AVENUE. CONSTRUCTION AT THIS INTERSECTION INVOLVES THE RECONSTRUCTION OF THE EXISTING TRAFFIC SIGNAL AND INTERCONNECTION WITH THE OTHER SIGNALIZED INTERSECTIONS IN THE NEW CITY--WIDE SYSTEM. IT IS ASSUMED THAT U.S. 40 WEST (WEST FRANKLIN STREET) RUNS IN AN EAST--WEST DIRECTION.

II. INTERSECTION OPERATION

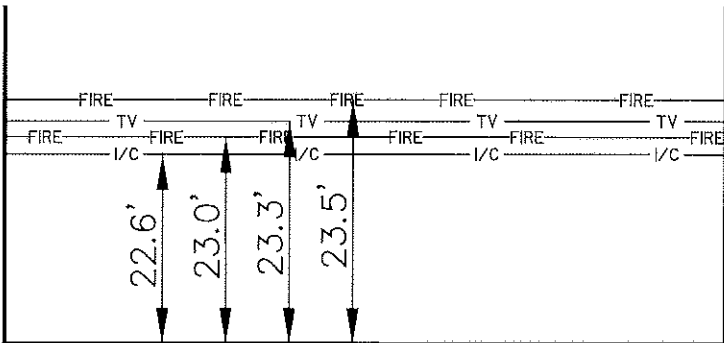
THE INTERSECTION WILL OPERATE IN A NEMA THREE (3) PHASE PRE--TIMED MODE. WESTBOUND U.S. 40 WEST (WEST FRANKLIN STREET) AND WEST SIDE AVENUE WILL OPERATE IN SEPARATE PHASES.

PRE-EMPTION ON WESTBOUND U.S. 40 WEST (WEST FRANKLIN STREET) WILL CALL PRE-EMPTION A. PRE-EMPTION ON SOUTHBOUND WEST SIDE AVENUE WILL CALL PRE-EMPTION B. PRE-EMPTION ON NORTHBOUND WEST SIDE AVENUE WILL CALL PRE-EMPTION C.

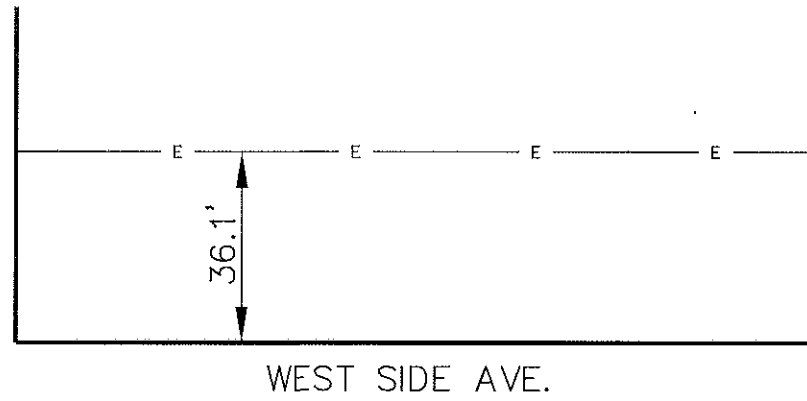
A NEW EIGHT PHASE FULLY ACTUATED CONTROLLER WITH TELEMETRY MODULE AND PRE-EMPTION HOUSED IN A GROUND MOUNTED CABINET WILL BE INSTALLED.

A/E GROUP, INC.
ENGINEERS • PLANNERS
181 E. Main Street
Westminster, Maryland 21158
A/E Job No. 95-289

① VERTICAL CLEARANCE SKETCH



② VERTICAL CLEARANCE SKETCH



NOTE: EXISTING RIGHT--OF--WAY BASED ON MDSA PLAT NO. 14093

REVISIONS	APPROVALS
	CHIEF, SIGNAL DESIGN SECTION
	ASST. DISTRICT ENGINEER, TRAFFIC
	CHIEF, TRAFFIC ENGINEERING DESIGN DIVISION
	DIRECTOR, OFFICE OF TRAFFIC & SAFETY

MDOT -- STATE HIGHWAY ADMINISTRATION
Office of Traffic & Safety
TRAFFIC ENGINEERING DESIGN DIVISION LOG MI.21W04035.22

DRAWN BY: M. GESELL
DES. BY: J. LAWRENCE
CHK. BY: _____

DATE: 05/30/97 F.A.P. NO. STPG-218-1(7)E TS NO. 3672
SCALE: 1" = 20' S.H.A. NO. WA9535185 SHEET NO. 17 OF 66

**US 40 West (West Franklin St.)
at West Side Ave.**

COUNTY: WASHINGTON